

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of )  
Paul E. Jacobs *et al.* ) For: A PORTABLE DEVICE WITH  
 ) VERATILE KEYBOARD  
 )  
Serial No. 10/718,125 )  
Filed: November 19, 2003 ) Examiner: Duc Q. Dinh  
 )  
 ) Group No. 2629

DECLARATION UNDER 37 CFR §1.131

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I, Steve Mergenthaler, based on information and belief, do hereby declare that:

1. I am an inventor of the above-captioned patent application, U.S. Application Serial No. 10/718,125, filed November 19, 2003.
2. At the time of the invention, I was employed by Qualcomm, Inc.
3. I conceived at least a portion of the invention claimed in claim 1 of the above identified patent application prior to September 29, 2003 in the United States and diligently worked the invention until a constructive reduction to practice in the United States as demonstrated by the Attached Exhibits and the above-noted '125 patent application.
4. Prior to September 29, 2003, I received an email from Mr. Paul Jacobs of Qualcomm, Inc., also an inventor of the '125 application, for discussion and preparation of the '125 application. Attached as Exhibit A, is a copy of the email message.

5. Prior to September 29, 2003, I contributed to the generation of a document entitled "Design Concepts and Mechanical Deployment of an Integrated 'QWERTY Plus' Multi Application Cellular Telephone," for use in preparing the '125 application. Attached as Exhibit B, is a copy of the document.

6. During the period between just prior to September 29, 2003 until November 19, 2003, I worked with patent attorneys Mr. Ben Miller and Mr. Christopher Edwards and patent agent Mr. Marc Hooks, all employed by Qualcomm, Inc. I provided information regarding the invention assisting Mr. Hooks to draft the '125 application. During this time period, I received several versions of the specification, the drawings, and the claims from Mr. Hooks for review. During the afore-mentioned time period, I reviewed several versions of the application in order to provide comments and correction to Mr. Hooks. The '125 application was filed on November 19, 2003.

7. Attached as Exhibit C is a table comparing the elements of claim 1 with the corresponding conception identified in Exhibits A and B.

8. Exhibits A-B, which relate to the aforementioned conception of the claimed invention followed by diligence until a constructive reduction to practice are hereby incorporated by reference in their entirety herein, correspond to the invention broadly disclosed and claimed in the above-identified patent application. Actual dates of Exhibits A-B have been removed, but are prior to September 29, 2003. Further, company proprietary information has been removed from all exhibits.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

DATED: 12/15/06

At Myrtle

# EXHIBIT A

Katbab, Abdollah

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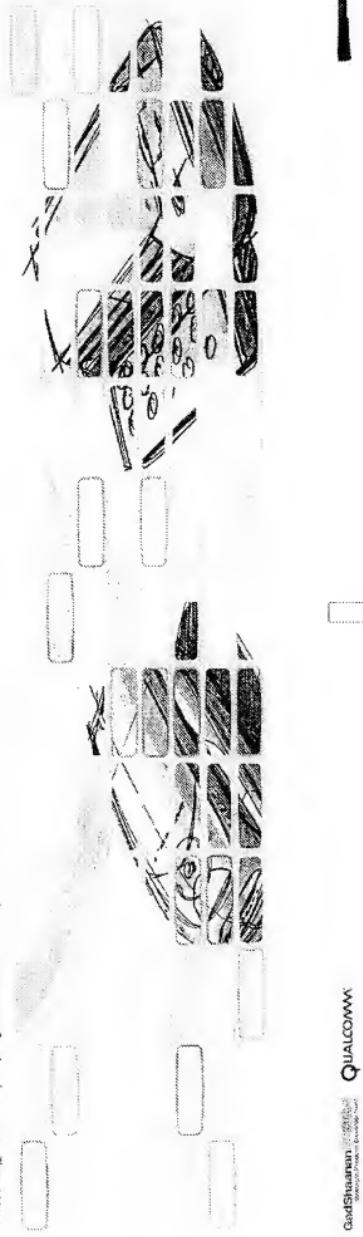
From: Steve Mergenthaler [smergen@qualcomm.com]  
Sent: Friday, September 29, 2006 10:45 AM  
To: Katbab, Abdollah  
Subject: Fwd: Re: Fwd: Re: A stupid idea I'd like to look into

>Subject: Re: Fwd: Re: A stupid idea I'd like to look into  
>Date: [REDACTED]  
>X-MS-Has-Attach:  
>X-MS-TNEF-Correlator:  
>Thread-Topic: Re: A stupid idea I'd like to look into  
>Thread-Index: AcMky3v0Z62Fjf5bRxicTJsgGbgttAAAZcr  
>From: "Jacobs, Paul" <pjacobs@qualcomm.com>  
>To: "Mergenthaler, Steve" <smergen@qualcomm.com>,  
> "Ward, Linda" <lward@qualcomm.com>  
>X-OriginalArrivalTime: [REDACTED]  
>FILETIME=[132E8AE0:01C32465]  
>  
>I'd like to get together as soon as we can find a time. Linda?  
>  
>Thx- paul  
>  
>  
>  
>-----Original Message-----  
>From: Mergenthaler, Steve <smergeh@smtphost.qualcomm.com>  
>To: Jacobs, Paul <pjacobs@qualcomm.com>  
>Sent: [REDACTED]  
>Subject: Fwd: Re: A stupid idea I'd like to look into  
>  
>Hi Paul -  
>We obviously didn't hook up last week - I had something down on MM for  
>last Monday but was never confirmed, and I ended up in Chicago for the  
>tail end of the week.  
>  
>Do you still want me to set something up on MM to discuss the below  
>idea? You look really booked this week <and next>, but I can shoot for  
>the next available time. Please let me know, or you could also have  
>Linda schedule it. Thanks.  
>  
>Steve  
>  
>  
>  
>Date: [REDACTED]  
>To: "Jacobs, Paul" <pjacobs@qualcomm.com>  
>From: Steve Mergenthaler <smergen@qualcomm.com>  
>Subject: Re: A stupid idea I'd like to look into  
>  
>At [REDACTED], you wrote:  
>  
>  
>Before going out of house I'd like to try to get some IP protection.  
>Let's talk on Monday.  
>  
>Where do all the ESS mechanical folks report?  
>  
>  
>Tom Pierce  
>  
>I'll set up some time early next week on MM at your office.  
>

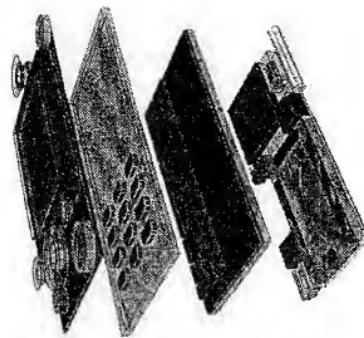
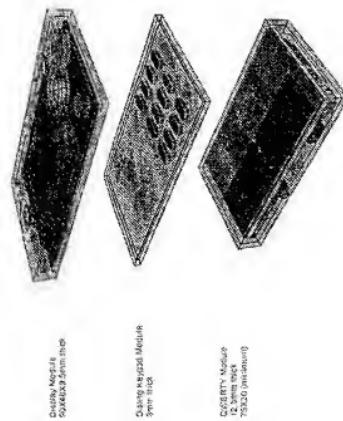
>Steve  
>  
>  
>  
>  
>Paul  
>  
>  
>-----Original Message-----  
>From: Mergenthaler, Steve <smrgen@smtphost.qualcomm.com>  
>To: Jacobs, Paul <pjacobs@qualcomm.com>  
>Sent: [REDACTED]  
>Subject: Re: A stupid idea I'd like to look into  
>  
>I kind of understand, but may need a little more description verbally.  
>  
>Unfortunately, the right mechanical guys to study this in proper detail  
>probably don't exist here anymore (I don't have anyone mechanical  
>reporting to me other than Chintala). We have been relying on PDT in  
>Chicago for most of our subscriber-type mechanical support (Casper,  
>Carmen, Giraffe, etc) and they have done a great job. We were about to  
>start brainstorming some low cost phone ideas with them, so if  
>appropriate, maybe they could sketch something up along the lines of  
>what you're proposing as well.  
>  
>I'll try to give you a call later and see how we want to proceed. Thanks.  
>  
>At [REDACTED], you wrote:  
>  
>  
>Steve,  
>  
1 >I've been trying to figure out how to build a small phone that would  
2 >have both a phone and QWERTY keyboard.  
3 >  
4 >I came up with the idea of a display that slides in two directions. If  
5 >the phone is rectangular, sliding the display up the longer side would  
6 >reveal a telephone keypad and extend the phone [REDACTED].  
7 >Sliding the display up the shorter side would reveal a QWERTY keyboard.  
8 >I would imagine that the telephone keypad would just push through to  
9 >the QWERTY keyboard below it to keep it as thin as possible.  
10 >  
11 >Up to now, this was hard (though probably not impossible) because of  
12 >the number of connections going between the display and the body of the  
13 >phone. We are going to move to MDDI which will allow the interface to  
14 >be done with two wires.  
15 >  
16 >Anyways, could you or one of your mechanical guys think a bit about how  
17 >much room this might take to implement in its thinnest form?  
18 >  
19 >I am convincing myself that this is the best idea for a keyboard device  
20 >that is also a phone. :-)  
21 >  
22 >If I am not clear, let me know and I'll try to explain better.  
23 >  
24 >Paul

# EXHIBIT B

Design Concepts and Mechanical Deployment of an Integrated "QWERTY Plus" Multi Application Cellular Telephone  
Phase III: Preliminary Styling and Detailed Design Definition



## Component Layout: Triple Module Unit

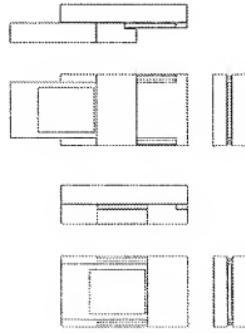


Note: All weight dimensions are shown in g. Device with  
Dual SIM and 3G antenna weighs ~ 300g (10.5oz).  
Please refer to the following table for the weight of each module.

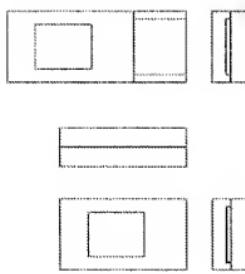
AMC Camera 26.2x39.9x 2.7 5.8x9.7x7.4x .5 Vishay 20940	Bottom Speaker 0.13 x 7.52 MC 110
Radio Speaker 22.5x41.3x 2.5 50x98 mm <sup>2</sup>	MC USB 0.11x7x1.14
Galaxy 30x41x3.5	Camera 10x10x7
	Speaker 0.16 x 7.53
	Ultrabend 13.0x24.3x 2.3

## Architecture

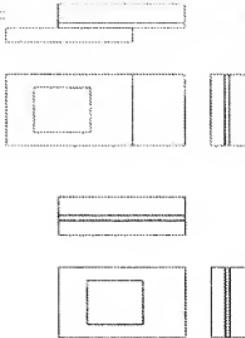
Layout 1



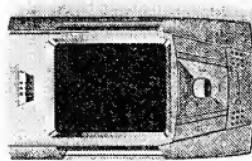
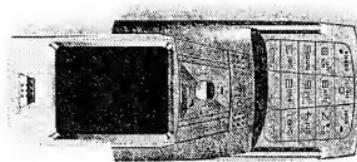
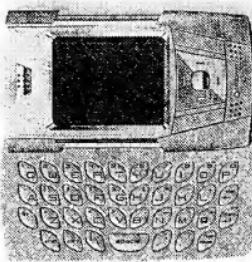
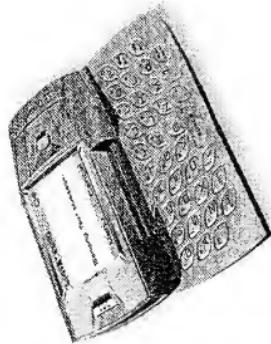
Layout 2



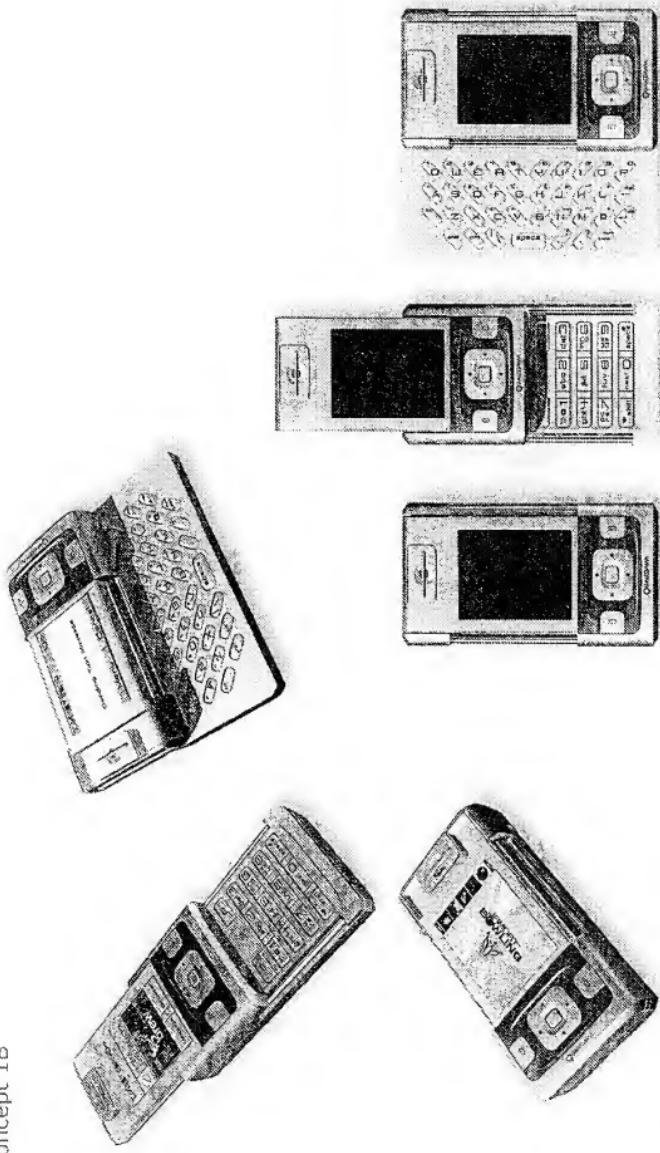
Layout 3



Concept 1A



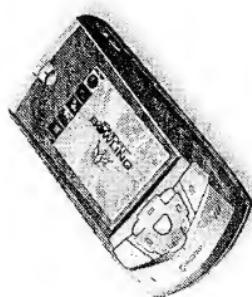
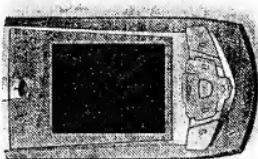
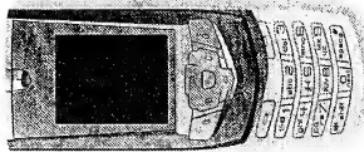
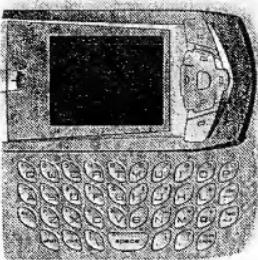
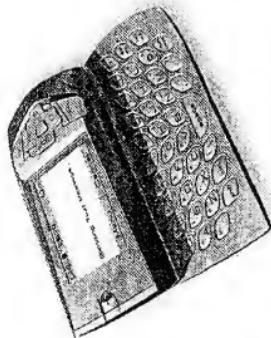
Concept 1B

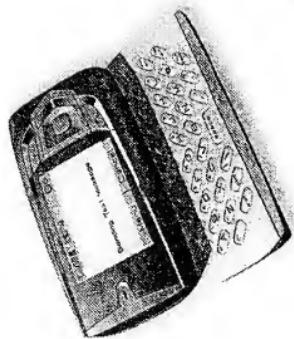
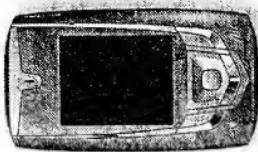
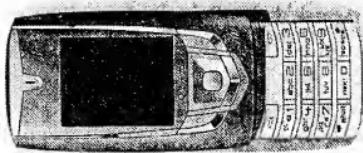
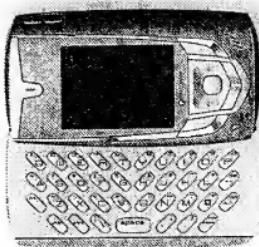


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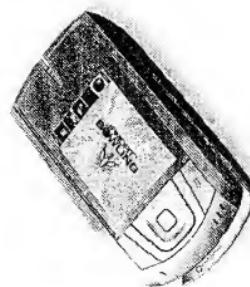
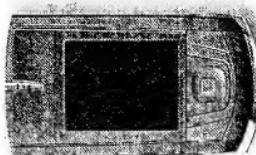
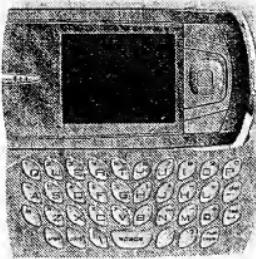
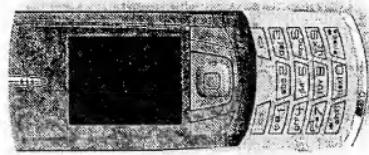
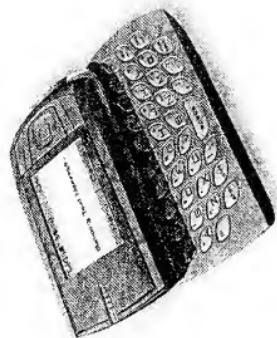
Concept 2A



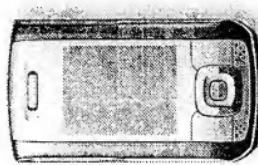
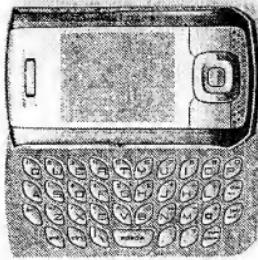
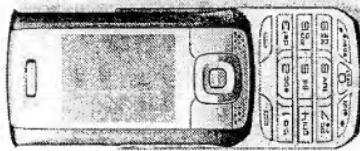


## Concept 2B

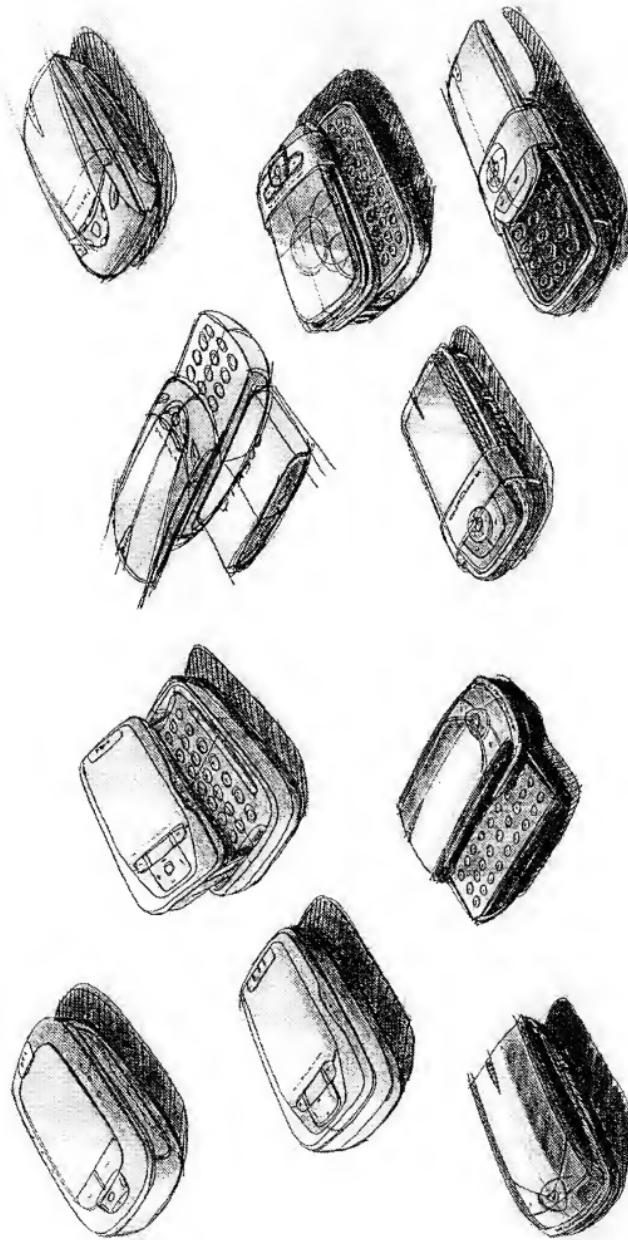
Concept 3A



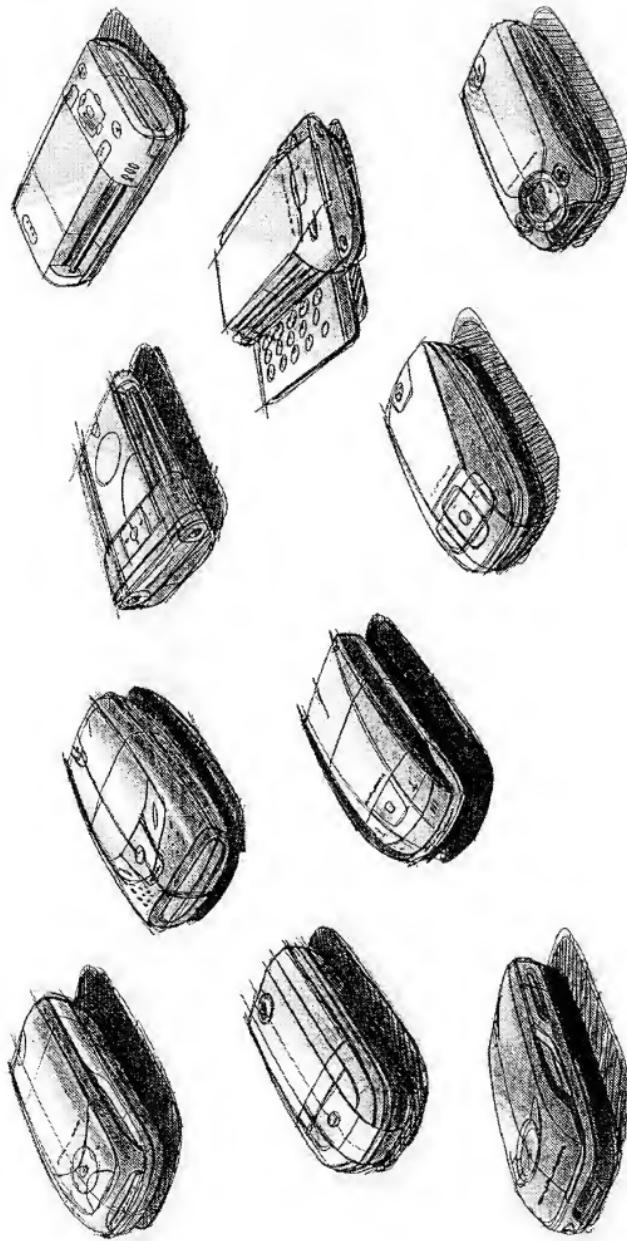
Concept 3B



Concept Sketches



Concept Sketches



# EXHIBIT C

1. An apparatus comprising:  a display for presenting information to a user;	Exhibit A, page2, last email, line 4. Exhibit B, pages 4-9.
a housing connected to the display for supporting the display; and	Exhibit B, pages 4-9.
a keyboard assembly connected through a sliding connection to the housing, the keyboard assembly deployable in multiple directions,	Exhibit A, page 2, last email, line 4-5 and 7. Exhibit B, pages 4-9.
wherein the information presented to the user through the display is oriented based on a direction of deployment of the keyboard assembly.	Exhibit B, pages 4-9, top two illustrations.